

REMARKS

Claims 1-3, 5, 7, and 8 have been amended. Claims 12-15 have been added. Accordingly, claims 1-15 are currently pending in the application.

Priority

Applicants appreciate the Examiner's acknowledgment of the claim for priority and the safe receipt of the priority document.

35 U.S.C. §112 and Claim Objections

Claims 1-3, 5 and 8 have been amended to overcome the objections set forth on page 2 of the Office Action. In addition, claim 8 has been amended to overcome the rejection under 35 U.S.C. §112.

In the Office Action, it was indicated that claims 1-4 and 9 would be allowable if the informalities causing the objections to these claims were corrected. Accordingly, in view of the foregoing amendments, it is believed that claims 1-4 and 9 are now in condition for allowance.

35 U.S.C. §102

Claims 5-8, 10 and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by Martinez (U.S. Patent No. 4,498,146). These rejections are traversed as follows.

The present invention is directed to defective sector processing for a disk drive, whereby the volume of control information is reduced so that the buffer memory is conserved and fewer accesses are required. Under the invention, a storage means stores pieces of defective track information, which each indicate the existence of defective tracks for a group of a plurality of tracks, into storage areas at addresses corresponding to pieces of physical track number information. The storage means may store the pieces of defect information on defective tracks in predetermined groups. Additionally, the storage means may store pieces of pointer information that indicate start addresses of the storage areas corresponding to the above-mentioned predetermined groups. When the processing means of the invention receives an instruction of read or write to a track of the storage means, the processing means refers to a piece of the physical track number information on defective tracks, based on the addresses, to detect a piece of the defect information. When

the track as an object of the instruction is a defective track, the processing means performs defect processing on the defective track based on the piece of the defect information. The pieces of the defect information of the invention may have a plurality of formats for processing a plurality of defects.

In the patent to Martinez, the defect information is independently managed for each sector basis. For example, when the processing means receives instructions to read or write from or to a medium, the processing means refers to the physical track number information of each defective track based upon its address. When the instructed object track is defective, the processing means refers to each pointer information to detect each defect information shown in the storage area of the pointer information, and performs detect processing for the defective track based upon the defect information for each track. (See, e.g., Column 8, line 6 through Column 9, line 7.)

In contrast, according to claims 5 and 7 of the present application, as amended, the defect information has a plurality of formats for defect processing. (See, e.g., FIGS. 9 and 10 and related description at page 21 of the specification.) Therefore, according to the present

invention, it is not necessary to provide separate defect information for each sector if the sequential sectors are defective. Thus, the memory for storing the defect information can be conserved. Accordingly, since Martinez and the other art of record do not teach the invention set forth in claims 5 and 7, these claims are considered to be allowable. Claims 6, 8, and 10-15 depend from these claims, and are also allowable.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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